

FREEWAVE USER MANUAL





INTRODUCTION

Thank you for choosing the Vello FreeWave Wireless Remote Shutter Release. This device triggers your camera wired or wirelessly, allowing you to trip the shutter without disturbing the camera. It's ideal for taking pictures of subjects that are difficult to approach, such as wildlife. It also eliminates vibrations caused by pressing your camera's shutter release button during macro, close-up, or long-exposure photography. The two-second delay function is great for self-portraits.

Unlike infrared remotes, which won't work if the receiver is not in direct line-of-sight of the transmitter, the FreeWave uses radio frequencies. Radio waves can pass through and around objects such as walls, windows, and floors. You can even trigger your camera around corners.

The FreeWave can transmit over 16,000,000 possible channels, and there are no dip switches to set. The device configures with the press of a button.



**Your Vello FreeWave
Wireless Remote Shutter Release
kit contains:**

*Wireless RF Receiver,
Wireless RF Transmitter,
Camera Release cable,
Battery, Lanyard, and Clip.*

KEY FEATURES

Smart Code: 16,000,000 possible radio channels. No dip switches to set. One transmitter can trigger multiple receivers.

Extended Range: up to 100m (320 ft.)

Multi-function: Trigger your camera wirelessly or wired. Wired triggering works even if the battery in the receiver is dead or missing.

Versatile: One receiver works with dozens of camera models. Just swap out the camera release cable.

Dual-Function Release: Press halfway to focus; press full to trigger shutter.

Delayed Release: Two-second delay function gives you extra time to get into position.

Multi-exposure: Take multiple shots with one press of the trigger.

Long Exposure: Control the length of the exposure remotely.

LED indicators: Confirm pre-focus and exposure during wireless mode.



SAFETY WARNINGS

- There are no user-serviceable parts inside the devices. Do not attempt to disassemble or perform any unauthorized modification.
- Do not operate the FreeWave in the presence of flammable gas or vapors.
- Do not handle with wet hands or immerse in or expose to water or rain. Failure to observe this precaution could result in fire or electric shock.
- Keep out of the reach of children. This device contains small parts which may pose a choking hazard.
- Observe caution when handling batteries. Batteries may leak or explode if improperly handled. Use only the batteries listed in this manual. Make certain to align batteries with correct polarity.
- Batteries are prone to leakage when fully discharged. To avoid damage to the product, be sure to remove the batteries when leaving the product unattended for prolonged periods or when no charge remains.
- Do not use or leave the devices in conditions of extreme heat, severe cold, or high humidity.
- Turn off the camera's power before inserting or removing the remote cord.
- Dispose used batteries, packaging, and old devices in accordance with appropriate local environmental regulations.

FEATURES DIAGRAM



POWERING UP

Turning ON the Receiver: Press and hold the Set/Power button until the red LED comes on. The Receiver turns off the same way. Press and hold the Set/Power button until the red LED turns off.

Turning ON the Transmitter:
There is no need for a power button on the Transmitter. The Transmitter is always ready to fire and uses power only when you press the shutter release button.



Press and hold the Set/Power button for ~3 seconds to power up the Receiver.

SETTING THE SMART CODE

The FreeWave supports 16,000,000 possible radio channels. The units have been synchronized at the factory, so your system can work right out of the box. However, to maximize signal quality and range, it's best to use the Smart Code technology to sense the "quiet" frequencies in your environment and re-synchronize on that channel.

Multiple receivers can be programmed to respond to a single transmitter, allowing you to trigger several cameras with a single transmitter.

To synchronize the Transmitter and Receiver(s):

1. Turn on the Receiver(s) by pressing and holding the **Set/Power** button until the left red LED comes on.
2. Set the Receiver(s) to **Ready** and the Transmitter to **Single/Bulb**.
3. Press the **Set/Power** button on the Receiver(s) five times. The right LED will begin blinking red.
4. Fully depress the shutter button on the Transmitter. The right LED on the Receiver(s) will blink and then turn off.

5. Your Smart Code is set and will remain set to this code even after the Receiver is turned off.

To test for synchronization, press the shutter release button on the Transmitter. If you press halfway, the right LED on the Receiver will light green. Pressing all the way will turn the LED red. If you don't see this confirmation, re-synchronize the units.

MOUNTING THE RECEIVER

If using the FreeWave wirelessly, mount the Receiver on your camera's hot shoe, facing forwards or backwards.

If your camera's hot shoe is in use, you can use an optional straight bracket accessory (Vello CB-600) to attach the Receiver to your camera.

With your camera and Receiver OFF, connect the shutter release cable's sub-mini plug end to the Receiver and the other end to your camera's shutter release jack. Power up your camera and Receiver.



SINGLE SHOTS | WIRELESSLY

1. Turn on the Receiver by pressing and holding the **Set/Power** button until the left red LED comes on.
2. Set the Receiver to **Ready** and the Transmitter to **Single/Bulb**.
3. Press the Transmitter's shutter release button halfway to wake or focus your camera (if set to Auto Focus). The LED will turn green.
4. Fully depress the shutter button on the Transmitter. The LED will turn red and the shutter will be triggered.



TWO SECOND DELAY / WIRELESSLY

1. Turn on the Receiver by pressing and holding the **Set/Power** button until the left red LED comes on.
2. Set the Receiver to **Ready** and the Transmitter to **2 Sec Delay**.
3. Press the Transmitter's shutter release button halfway to focus the camera (if set to Auto Focus).
The LED will turn green.
4. Fully depress the shutter button on the Transmitter. The LED will turn red and the shutter will be triggered after a two second delay.



CONTINUOUS MODE / WIRELESSLY

1. Turn on the Receiver by pressing and holding the **Set/Power** button until the left red LED comes on.
2. Set the Receiver to **Ready** and the Transmitter to **Cont.**
3. Press the Transmitter's shutter release button halfway to focus the camera (if set to Auto Focus). The LED will turn green.
4. If your camera is set to **Single Shot Mode**, a full press of the Transmitter's shutter button will trigger the camera to take five photos.
If your camera is set to **Continuous Mode**, a full press of the Transmitter's shutter button will trigger the camera to take continuous photos until you release the shutter button.

To lock in Continuous Mode: Set the Receiver to **Ready** and the Transmitter to **Single/Bulb**. Set your camera to **Continuous Mode**. Fully press the Transmitter shutter button for four seconds. The camera will continue to take photos until you press the shutter button again.



BULB MODE (LONG EXPOSURE) | WIRELESSLY

1. Set your camera to **Bulb** mode.
2. Turn on the Receiver by pressing and holding the **Set/Power** button until the left red LED comes on.
3. Set the Receiver to **Ready** and the Transmitter to **Single/Bulb**.
4. Press the Transmitter's shutter release button halfway to wake or focus the camera (if set to Auto Focus). The LED will turn green.
5. Fully depress the Transmitter's shutter button for three seconds until the red LED on the Transmitter turns off. The shutter will remain open until you half-press or full-press the shutter button again.



SINGLE SHOTS | WIRED

The FreeWave Receiver can also be used as a wired remote. With your camera and receiver OFF, connect the shutter release cable's miniplugin end to the Receiver and the other end to your camera's shutter release jack. Power up your camera. The Receiver does not need to be on, but because the Receiver does not need power in wired mode, the LEDs will not light.

1. Turn on the Receiver by pressing and holding the **Set/Power** button until the left red LED comes on.

2. Set the Receiver to **Ready**.
3. Press the Receiver's shutter release button halfway to wake or focus your camera (if set to Auto Focus). The confirmation LED will not display, so be sure to manually focus or allow the camera to Auto Focus without confirmation.
4. Fully depress the shutter button on the Receiver. The shutter will be triggered.

Moving the Receiver switch to **Hold** will also trigger the shutter.



CONTINUOUS MODE | WIRED

1. Power up your camera and set it to Continuous Mode. The Receiver does not need to be on, but because the Receiver does not need power in wired mode, the LEDs will not light.

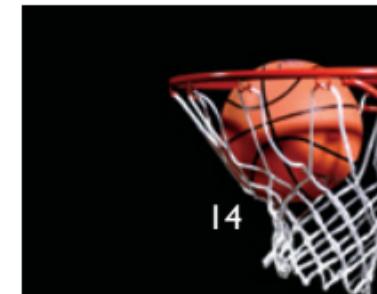
2. Set the Receiver switch to Ready.

3. Press the shutter release button halfway to wake or focus the camera (if set to Auto Focus).

The confirmation LED will not display, so be sure to focus manually or allow the camera to Auto Focus without confirmation.

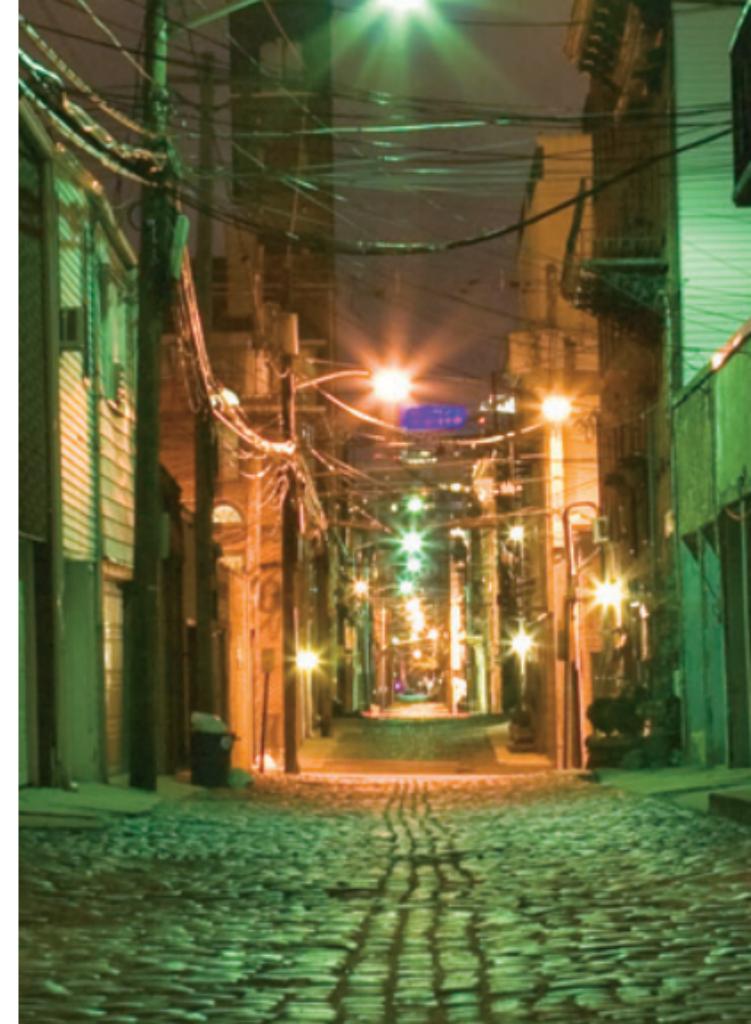
4. A full press of the shutter button will trigger the camera to take continuous photos until you release the shutter button.

You can also take continuous photos by moving the Receiver switch to the Hold position. The camera will take photos until you move the switch back to the Ready position.



BULB MODE (LONG EXPOSURE) | WIRED

1. Power up your camera and set it to Bulb Mode. The Receiver does not need to be on, but because the Receiver does not need power in wired mode, the LEDs will not light.
2. Set the Receiver to Ready.
3. Press the Receiver's shutter release button halfway to wake or focus the camera (if set to Auto Focus). The confirmation LED will not display, so be sure to focus manually or allow the camera to Auto Focus without confirmation.
4. Fully depress the Receiver's shutter button to take the shot. The shutter will stay open as long as the shutter button is pressed.
Sliding the Receiver switch to the Hold position will keep the shutter open until the switch is returned to the Ready position.



CHANGING THE BATTERIES

The FreeWave Receiver uses a CR2 3V battery which should last through approximately 20,000 triggers. It is easy to change. Slide open the battery door on the end of the unit.

The FreeWave Transmitter uses a 23A 12V battery, which should last three years under normal conditions. To replace the battery, release two screws on the back of the unit to access the battery. Be sure to line up the catches on the selector switch before closing.



CAMERA RELEASE CABLES

The FreeWave includes a camera release cable that enables the remote to work with certain models of cameras, but just by changing the camera release cable, a single FreeWave Receiver can work with many other cameras as well.

At right are models of Vello Camera Release Cables for FreeWave and the cameras they support. For these cables, and cables for other camera models, check with your Vello dealer.

RCC-C2 – **Canon** EOS 10D / 20D / 30D / 40D / 50D / 5D / 5D Mark II / 5D Mark III / 7D / 1D / Mark II / Mark IIIn / Mark III /Mark IV / 1DS / Mark II/ Mark III / 1D X

RCC-N1 – **Nikon** D1 / D1H / D1X / D2 / D2H/ D2Hs / D2X / D2XS / D3 / D3X / D3S / D4 / D200 / D300 / D300s / D700 / D800 / D800E **Fuji** S3pro / S5Pro **Kodak** DCS-14N

RCC-C1 – **Canon** EOS 30 / 33 / 50 / 60D / 300 / Digital Rebel (300D) / XT (350D) / XTi (400D) / XSi (450D) / XS (1000D) / T1i (500D) / T2i (550D) / T3 (1100D) / T3i (600D) / Powershot G10 / G11 / G12 / G1 X **Contax** N / 645 **Pentax** K100D / K110D / K200D / K10D / K20D / K-5 / K-7 / *ist DS / DS2 / DL2 / DL / D **Sigma** SD1 **Samsung** GX-1S / GX-1L / GX-10 / GX-20 / NX Series

RCC-S1 – **Sony** A100 / A200 / A300 / A350 / A500 / A550 / A560 / A580 / A700 / A850 / A900 / SLT A33 / A35 / A55 / A57 / A65 / A77

RCC-O1 – **Olympus** E400 /E410 / E420 / E450 / E510 / E520 / E620 / E-P2 / E-P3 / E-PL2 / E-PL3 / E-PM1 / SP-510UZ / SP-550UZ / SP-560UZ / SP-570UZ / XZ-1

RCC-O2 – **Olympus** E-1/ E-3/ E-5

RCC-N3 – **Nikon** D70s / D80

RCC-N2 – **Nikon** D90 / D3100 / D3200 / D5000 / D5100 / D7000

RCC-P1 – **Panasonic** DMC-L1 / DMC-L10/ DMC-G1/ DMC-GF1 / DMC-GH1 / DMC-GX1/ DMC-G2 / DMC-GH2 / DMC-G3 / DMC-G10 / DMC-FZ100 / DMC-FZ150



SPECIFICATIONS | TROUBLESHOOTING

	Transmitter	Receiver
Power	12V / 23A	3V / CR2
Battery Life	up to 3 years	approx. 20,000 triggers
Smart Code Channels	16,000,000 possible codes	
Range	100m (320 ft) with no obstructions	
Frequency	433 MHz	
Confirmation LEDs	2 color	
Shutter Modes	single shot, 2-second delay, continuous, & bulb	

Troubleshooting

Problems with the FreeWave can be traced to the following most common causes. Perform the following steps to diagnose the problem:

- Check that the shutter release cable is in good condition and is properly connected.
- Make sure that the Receiver switch has not been set to Hold.
- Remove the battery from the Receiver, reinsert it, and reset the Smart Code.

FCC COMPLIANCE

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designated to provide reasonable protection against harmful interference in a residential installation. There is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment ON or OFF, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna;
2. Increase the distance between the equipment and the receiver.

This device complies with Part 15, Subpart B, Class B of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference;
2. This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications (including the antennae) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

Limited One-Year Warranty

Vello provides a limited warranty that this product is free from defects in materials and workmanship to the original purchaser under normal use for a period of one (1) year from the original purchase date or thirty (30) days after replacement whichever occurs later. Vello's responsibility with respect to this limited warranty shall be limited solely to repair or replacement, at its option, of any product which fails during normal consumer use. This warranty does not extend to damage or failure which results from misuse, neglect, accident, alteration, abuse, improper installation or maintenance. EXCEPT AS PROVIDED HEREIN, VELLO MAKES NEITHER ANY EXPRESS WARRANTIES NOR ANY IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. To obtain a replacement during the time of this warranty please return the defective item with proof of purchase along with an RMA number to the place of purchase. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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